WEST Search History

DATE: Monday, March 25, 2002

| Set Name | | Hit Count Se | t Name esult set |
|------------------------|--|--------------|---------------------|
| side by side $DR = II$ | SPT,PGPB; PLUR=YES; OP=ADJ | 6 | L8 |
| L8 | 11 and 12 and 15 and 17 | 76 | L7 |
| L7 | loft\$2 same web and x\$1 same y\$1 same z\$1 and directions | 6 | L6 |
| L6 | 11 and 12 and 13 and 15 | 16313 | L5 |
| L5 | plurality same ridges and surfaces | 400 | L4 |
| L4 | L3 | 400 | L3 |
| L3 | z\$1direction same orientation | 18644 | L2 |
| L2 L1 | plurality and continuous same (fibers or fibres) (non\$1woven or un\$1woven) and web | 14605 | L1 |

END OF SEARCH HISTORY

1 of 1

| Set Name | | Hit Count Se | et Name esult set |
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| DB=U | SPT,PGPB,DWPI; PLUR=YES; OP=ADJ | 2 | L7 |
| L7 | 11 and 12 and 14 and 16 | _ | |
| | loft\$2 same web and x\$1 same y\$1 same z\$1 and | 94 | <u>L6</u> |
| <u>L6</u> | directions | 3 | <u>L5</u> |
| L5 | 11 and 12 and 13 and 14 | _ | |
| | plurality same loops and surfaces | 29086 | <u>L4</u> |
| <u>L4</u> | z\$1 direction same orientation | 1521 | <u>L3</u> |
| <u>L3</u> | z\$1 direction same officiation | 22130 | <u>L2</u> |
| <u>L2</u> | plurality and continuous same (fibers or fibres) | 23024 | <u>L1</u> |
| <u>L1</u> | (non\$1 woven or un\$1 woven) and web | 23021 | == |

END OF SEARCH HISTORY

WEST

Generate Collection

Print

Search Results - Record(s) 1 through 6 of 6 returned.

1. Document ID: US 20010054777 A1

L8: Entry 1 of 6

File: PGPB

Dec 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010054777

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010054777 A1

TITLE: Materials having z-direction fibers and folds and method for producing same

PUBLICATION-DATE: December 27, 2001

INVENTOR-INFORMATION:

| NAME | CITY | STATE | COUNTRY | RULE-47 |
|-------------------------|------------|-------|---------|---------|
| White, Edward Jason | Mauldin | SC | US | |
| Brown, Kurtis Lee | Alpharetta | GA | US | |
| Conrad, John Herbert | Alpharetta | GA | US | |
| Gerndt, Robert James | Roswell | GA | US | |
| Maldonado, Jose Enrique | Alpharetta | GA | US | |

US-CL-CURRENT: 264/103; 156/148, 156/176, 156/180, 264/171.1

ABSTRACT:

A method for producing a material having z-direction ridges or folds in which a layer of continuous fibers is conveyed on a first moving surface into a nip formed by the first moving surface and a second moving surface which is traveling at a slower speed than the first moving surface, resulting in formation of a plurality of z-direction loops in the fibers giving loft to the material and a wave pattern producing ridges on both major surfaces of the resultant nonwoven web. The method permits easy real time adjustment of manufacturing parameters to produce a variety of materials. The method further produces lofty nonwovens at a commercially viable rate.

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWIC Draw Desc Image

2. Document ID: US 6316688 B1

L8: Entry 2 of 6

File: USPT

Nov 13, 2001

US-PAT-NO: 6316688

DOCUMENT-IDENTIFIER: US 6316688 B1

TITLE: Sanitary napkin comprising three dimensionally shaped tube

of absorbent material

DATE-ISSUED: November 13, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Hammons; John Lee Hamilton OH
McFall; Ronald Ray West Chester OH
Noel; John Richard Cincinnati OH
Gann; Diana Lynne Lebanon OH
Hines; Letha Margie Cincinnati OH

Grandison; Kevin Eugene Caracas VEX

Osborn, III; Thomas Ward Cincinnati OH

US-CL-CURRENT: 604/378; 604/385.01, 604/385.17

ABSTRACT:

A sanitary napkin that has a three dimensionally-shaped tube of absorbent material and method of making the same is disclosed. The sanitary napkin comprises: a base pad having a body-facing side, a garment-facing side, and a longitudinal centerline. A tube of absorbent material extends outward from the body-facing side of the base pad and is aligned along the longitudinal centerline of the base pad. In one embodiment, the tube of absorbent material comprises an absorbent material and a cover at least partially wrapping the absorbent material. In this embodiment, the absorbent material is penetrated by autogenous bonds that join one portion of the cover to an opposing portion of the cover. The bonds are selectively placed to provide the tube of absorbent material with a distinct three-dimensional shape.

24 Claims, 34 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 15

Full Title Citation Front Review Classification Date Reference Sequences Attachments

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2 3. Document ID: US 6183587 B1

L8: Entry 3 of 6

File: USPT

Feb 6, 2001

US-PAT-NO: 6183587

DOCUMENT-IDENTIFIER: US 6183587 B1

TITLE: Method of making sanitary napkin comprising three dimensionally shaped tube of absorbent material

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

McFall; Ronald Ray West Chester OH
Hammons; John Lee Hamilton OH
Gann; Diana Lynn Lebanon OH
Noel; John Richard Cincinnati OH

US-CL-CURRENT: 156/201; 156/202, 156/204, 156/216, 156/227, 156/269, 156/270, 156/290, 156/292, 156/308.2, 156/308.4, 156/73.1, 604/367, 604/385.01

ABSTRACT:

The method of making a shaped tube of absorbent material for the sanitary napkin, in one embodiment, involves the steps of: (a) providing a web of absorbent material, the web of absorbent material having a length, a width, a longitudinal centerline oriented in the direction of the length of the web of absorbent material, a first surface and an opposed second surface; (b) providing a cover for the first and second surfaces of the web of absorbent material; (c) at least partially covering the first and second <u>surfaces of the web</u> of absorbent material with the cover to form a composite web having longitudinal side margins; (d) folding the composite web at least once with folds defining fold lines that are arranged about the longitudinal centerline of the web of absorbent material; and (e) autogenously bonding a portion of the cover that covers the first surface of the web of absorbent material to a portion of the cover that covers an opposing portion of the second surface of the web of absorbent material.

8 Claims, 54 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 15

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

KNMC Draw Desc Image

4. Document ID: US 5888607 A

L8: Entry 4 of 6

File: USPT

Mar 30, 1999

US-PAT-NO: 5888607

DOCUMENT-IDENTIFIER: US 5888607 A

TITLE: Soft loop laminate and method of making

DATE-ISSUED: March 30, 1999

INVENTOR - INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Seth; Jayshree

Woodbury

MN

Rogers; John J.

St. Paul MN

US-CL-CURRENT: 428/92; 428/101, 428/95, 428/97, 428/99

ABSTRACT:

There is provided a soft nonwoven fibrous loop material for use in hook and loop fastening systems. The nonwoven fibrous loop material of the invention contains an open fibrous loop layer comprised predominately of polypropylene polymer, copolymer or blend fibers. The nonwoven fibrous loop layer material is autogeneously bonded to a backing layer formed of polypropylene polymers or copolymers having a percent isotacticity of less than 70%, optionally with additional layers present provided so that the overall nonwoven fibrous loop material is a laminate having a circular bend stiffness of less than about 9 Newton and having tensile strength of at least 1500 g/2.54 cm-width.

40 Claims, 8 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 3

Full Title Citation Front Review Classification Date Reference Sequences Attachments

1304C | Draw Desc | Image |

5. Document ID: US 5797894 A

L8: Entry 5 of 6

File: USPT

Aug 25, 1998

US-PAT-NO: 5797894

DOCUMENT-IDENTIFIER: US 5797894 A

TITLE: Unitized sanitary napkin

DATE-ISSUED: August 25, 1998

INVENTOR - INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

Cadieux; Serge

Pierrefonds

CAX CAX

Levesque; Yvon

Montreal

US-CL-CURRENT: <u>604/378</u>

ABSTRACT:

This invention relates to a novel absorbent structure and absorbent products containing this absorbent structure. More particularly, the absorbent structure of this invention contains a high-loft, bulky, low-density cover layer, a higher density transfer layer, a very high density, retentive reservoir layer and an impermeable

barrier layer. The cover and barrier layers are sealed around their periphery and, preferably, all the layers are bonded to each other to form a unitized structure.

16 Claims, 9 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full Title Citation Front Review Classification Date Reference Seguences Attachments

MMC Draw Desc Image

6. Document ID: US 5374260 A

L8: Entry 6 of 6

File: USPT

Dec 20, 1994

US-PAT-NO: 5374260

DOCUMENT-IDENTIFIER: US 5374260 A

TITLE: Unitized sanitary napkin

DATE-ISSUED: December 20, 1994

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|-----------------------|-----------|-------|----------|---------|
| Lemay; Martin | Montreal | | | CAX |
| Lariviere; Christiane | Lavaltrie | | | CAX |
| Comeau; Daniel | Lachenaie | | | CAX |
| Levesque; Yvon | Montreal | | | CAX |

US-CL-CURRENT: 604/378; 604/358, 604/367, 604/371, 604/379, 604/380, 604/385.04

ABSTRACT:

This invention relates to a novel absorbent structure and absorbent products containing this absorbent structure. More particularly, the absorbent structure of this invention is a flexible and retentive reservoir layer comprising a perf-embossed or tenderized peat board material.

8 Claims, 9 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 4

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Affachments

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has a first surface which defines the paper-contacting side of the belt, a second <u>surface</u> opposite the first <u>surface</u>, and conduits which extend between first and second surfaces of the belt. The first surface of the framework has a paper side network formed therein which defines the conduits. The second surface of the framework has a backside network with passageways that provide surface texture irregularities in the backside network. The papermaking belt is made by casting a photosensitive resinous material over and through the reinforcing structure while the reinforcing structure travels over a textured surface, and then exposing the photosensitive resinous material to light of an activating wavelength through a mask which has transparent and opaque regions. A process for making paper products is also disclosed which involves applying a fluid pressure differential from a vacuum source through the belt to a partially-formed embryonic web of papermaking fibers. The fibers in the embryonic web are deflected into the conduits of the papermaking belt by the vacuum pressure while the papermaking belt and the embryonic web travel over the vacuum source. Following the deflection, the paper web is impressed with the paper side network of the belt, and dried to form the final product.

20 Claims, 55 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 24

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Search Results - Record(s) 1 through 6 of 6 returned.

☐ 1. Document ID: US 20010054777 A1

L6: Entry 1 of 6

File: PGPB

Dec 27, 2001

PGPUB-DOCUMENT-NUMBER: 20010054777

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010054777 A1

TITLE: Materials having z-direction fibers and folds and method for producing same

PUBLICATION-DATE: December 27, 2001

INVENTOR-INFORMATION:

US-CL-CURRENT: 264/103; 156/148, 156/176, 156/180, 264/171.1

ABSTRACT:

A method for producing a material having z-direction ridges or folds in which a layer of continuous fibers is conveyed on a first moving surface into a nip formed by the first moving surface and a second moving surface which is traveling at a slower speed than the first moving surface, resulting in formation of a plurality of z-direction loops in the fibers giving loft to the material and a wave pattern producing ridges on both major surfaces of the resultant nonwoven web. The method permits easy real time adjustment of manufacturing parameters to produce a variety of materials. The method further produces lofty nonwovens at a commercially viable rate.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KIMC | Draw Desc | Image |

2. Document ID: US 6203654 B1

L6: Entry 2 of 6 File: USPT Mar 20, 2001

US-PAT-NO: 6203654

DOCUMENT-IDENTIFIER: US 6203654 B1

TITLE: Method of making a slitted or particulate absorbent material

DATE-ISSUED: March 20, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

McFall; Ronald Ray West Chester OH
Lavon; Gary Dean West Chester OH
Kollner; Wilfried Maria Cincinnati OH
Noel; John Richard Cincinnati OH
Hammons; John Lee Hamilton OH

US-CL-CURRENT: 156/268; 156/201, 156/202, 156/204, 156/216, 156/227, 156/257, 156/270, 156/308.2, 156/308.4, 225/103, 225/97, 604/378, 604/383, 604/385.01

ABSTRACT:

A method of making a slitted or particulate absorbent material for an absorbent article such as sanitary napkins, diapers, incontinence devices, and the like. The method can be carried out in situ on another component of the absorbent article in a manufacturing process without cutting the other component. In one embodiment, the absorbent material is placed between two canier webs, and a force is applied to the composite of the absorbent material and the carrier webs. The force breaks the absorbent material, but only deforms the carrier webs to provide a self-contained web of particulate material between two carrier webs.

28 Claims, 29 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 10

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

KMC | Draw Desc | Image

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3. Document ID: US 5888607 A

L6: Entry 3 of 6 File: USPT Mar 30, 1999

US-PAT-NO: 5888607

DOCUMENT-IDENTIFIER: US 5888607 A

TITLE: Soft loop laminate and method of making

DATE-ISSUED: March 30, 1999

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME

MN Seth; Jayshree Woodbury St. Paul MN Rogers; John J.

US-CL-CURRENT: 428/92; 428/101, 428/95, 428/97, 428/99

Full Title Citation Front Review Classification Date Reference Sequences Attachments

ABSTRACT:

There is provided a soft nonwoven fibrous loop material for use in hook and loop fastening systems. The nonwoven fibrous loop material of the invention contains an open fibrous loop layer comprised predominately of polypropylene polymer, copolymer or blend fibers. The nonwoven fibrous loop layer material is autogeneously bonded to a backing layer formed of polypropylene polymers or copolymers having a percent isotacticity of less than 70%, optionally with additional layers present provided so that the overall nonwoven fibrous loop material is a laminate having a circular bend stiffness of less than about 9 Newton and having tensile strength of at least 1500 g/2.54 cm-width.

40 Claims, 8 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 3

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☐ 4. Document ID: US 5364504 A

File: USPT Nov 15, 1994 L6: Entry 4 of 6

US-PAT-NO: 5364504

DOCUMENT-IDENTIFIER: US 5364504 A

TITLE: Papermaking belt and method of making the same using a

textured casting surface

DATE-ISSUED: November 15, 1994

INVENTOR-INFORMATION:

CITY STATE ZIP CODE · COUNTRY NAME

PA .

Smurkoski; John A. Meshoppen
Leggitt; Gary L. Springville
Wilson; Gregory L. Cincinnati PA OH

US-CL-CURRENT: 162/116; 162/111, 162/204

ABSTRACT:

A backside textured papermaking belt is disclosed which is

comprised of a framework and a reinforcing structure. The framework has a first surface which defines the paper-contacting side of the belt, a second surface opposite the first surface, and conduits which extend between first and second surfaces of the belt. The first surface of the framework has a paper side network formed therein which defines the conduits. The second surface of the framework has a backside network with passageways that provide surface texture irregularities in the backside network. The papermaking belt is made by casting a photosensitive resinous material over and through the reinforcing structure while the reinforcing structure travels over a textured surface, and then exposing the photosensitive resinous material to light of an activating wavelength through a mask which has transparent and opaque regions. A process for making paper products is also disclosed which involves applying a fluid pressure differential from a vacuum source through the belt to a partially-formed embryonic web of papermaking fibers. The fibers in the embryonic web are deflected into the conduits of the papermaking belt by the vacuum pressure while the papermaking belt and the embryonic web travel over the vacuum source. Following the deflection, the paper web is impressed with the paper side network of the belt, and dried to form the final product.

2 Claims, 55 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 24

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments

RMC Draw Desc Image

☐ 5. Document ID: US 5260171 A

L6: Entry 5 of 6

File: USPT

Nov 9, 1993

US-PAT-NO: 5260171

DOCUMENT-IDENTIFIER: US 5260171 A

TITLE: Papermaking belt and method of making the same using a

textured casting surface

DATE-ISSUED: November 9, 1993

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Smurkoski; John A. Meshoppen PA Leggitt; Gary L. Springville PA Wilson; Gregory L. Cincinnati OH

US-CL-CURRENT: 430/320; 162/116, 162/117, 162/348, 162/903, 428/152, 430/322

ABSTRACT:

A backside textured papermaking belt is disclosed which is

comprised of a framework and a reinforcing structure. The framework has a first surface which defines the paper-contacting side of the belt, a second surface opposite the first surface, and conduits which extend between first and second surfaces of the belt. The first surface of the framework has a paper side network formed therein which defines the conduits. The second surface of the framework has a backside network with passageways that provide surface texture irregularities in the backside network. The papermaking belt is made by casting a photosensitive resinous material over and through the reinforcing structure while the reinforcing structure travels over a textured surface, and then exposing the photosensitive resinous material to light of an activating wavelength through a mask which has transparent and opaque regions. A process for making paper products is also disclosed which involves applying a fluid pressure differential from a vacuum source through the belt to a partially-formed embryonic web of papermaking fibers. The fibers in the embryonic web are deflected into the conduits of the papermaking belt by the vacuum pressure while the papermaking belt and the embryonic web travel over the vacuum source. Following the deflection, the paper web is impressed with the paper side network of the belt, and dried to form the final product.

10 Claims, 55 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 24

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

KMC Draw Desc Image

6. Document ID: US 5098522 A

L6: Entry 6 of 6

File: USPT

Mar 24, 1992

US-PAT-NO: 5098522

DOCUMENT-IDENTIFIER: US 5098522 A

TITLE: Papermaking belt and method of making the same using a textured casting <u>surface</u>

DATE-ISSUED: March 24, 1992

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Smurkoski; John A. Meshooppen PA Leggitt; Gary L. Springville PA Wilson; Gregory L. Cincinnati OH

US-CL-CURRENT: 162/358.2; 162/348, 428/135, 428/138

ABSTRACT:

A backside textured papermaking belt is disclosed which is comprised of a framework and a reinforcing structure. The framework

WEST Search History

DATE: Monday, March 25, 2002

| Set Name side by side | | Hit Count | Set Name result set |
|--------------------------|--|-----------|------------------------|
| DB=U | SPT,PGPB; PLUR=YES; OP=ADJ | | |
| L6 | 11 and 12 and 13 and 15 | 6 | L6 |
| L5 | plurality same ridges and surfaces | 16313 | L5 |
| L4 | L3 | 400 | L4 |
| L3 | z\$1direction same orientation | 400 | L3 |
| L2 | plurality and continuous same (fibers or fibres) | 18644 | L2 |
| L1 | (non\$1woven or un\$1woven) and web | 14605 | L1 |

END OF SEARCH HISTORY